

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-167. (Cancelled)

168. (New) A tissue sealant or adhesive for use in a patient's body comprising:

- (a) a polymer solution; and
- (b) a degradation agent,

wherein the degradation agent is provided in the tissue sealant at a concentration suitable for degrading the polymer when the tissue sealant is placed in contact with the patient's tissues.

169. (New) The tissue sealant or adhesive according to claim 168 wherein the degradation agent comprises an enzyme.

170. (New) The tissue sealant or adhesive according to claim 168 wherein the polymer solution is selected from one or more of the group consisting of a protein solution, a carbohydrate solution, a nucleotide solution, and a synthetic polymer solution.

171. (New) The tissue sealant or adhesive according to claim 168 wherein the polymer solution comprises a protein solution.

172. (New) The tissue sealant or adhesive according to claim 171 wherein the protein is selected from the group consisting of albumin, collagen, gelatin, globulin, elastin, protamine, and histone.

173. (New) The tissue sealant or adhesive according to claim 171 wherein the degradation agent comprises a protease.

174. (New) The tissue sealant or adhesive according to claim 173 wherein the protease is selected from the group consisting of bromelain, trypsin, chymotrypsin, clostripain, collagenase, elastase, papain, proteinase K, pepsin, and subtilisin.

175. (New) The tissue sealant or adhesive according to claim 173 wherein the protease comprises trypsin.
176. (New) The tissue sealant or adhesive according to claim 168 wherein the polymer solution comprises a carbohydrate solution.
177. (New) The tissue sealant or adhesive according to claim 176 wherein the carbohydrate is selected from the group consisting of natural poly-saccharides, synthetic poly-saccharides, natural oligo-saccharides, and synthetic oligo-saccharides.
178. (New) The tissue sealant or adhesive according to 176 wherein the carbohydrate is selected from the group consisting of amylose, amylopectin, alginate, agarose, cellulose, carboxymethylcellulose, carboxymethylamylose, chitin, chitosan, pectin, and dextran.
179. (New) The tissue sealant or adhesive according to claim 176 wherein the degradation agent comprises a glucanase.
180. (New) The tissue sealant or adhesive according to claim 179 wherein the glucanase is selected from the group consisting of agarases, amylases, cellulases, chitinases, dextranases, hyaluranidases, lysosomes, and pectinases.
181. (New) The tissue sealant or adhesive according to claim 179 wherein the glucanase comprises a cellulase.
182. (New) The tissue sealant or adhesive according to claim 168 further comprising a surfactant.
183. (New) The tissue sealant or adhesive according to claim 168 further comprising a lipid.
184. (New) A method for degrading a polymer-based tissue sealant or adhesive comprising the step of mixing a polymer degrading agent with a polymer solution before applying the polymer solution to a tissue.
185. (New) The method according to claim 184 wherein the degradation agent is provided in an amount sufficient to promote the degradation of the tissue sealant or adhesive in less than 100 days.

186. (New) The method according to claim 184 wherein the degradation agent is provided in an amount sufficient to promote the degradation of the tissue sealant or adhesive in less than 50 days.

187. (New) The method according to claim 184 wherein the degradation agent is provided in an amount sufficient to promote the degradation of the tissue sealant or adhesive in less than 30 days.

188. (New) The method according to claim 184 wherein the degradation agent is provided in an inactive form and is activated after mixing with the polymer solution.

189. (New) A method for degrading a polymer-based tissue sealant or adhesive at a tissue locus comprising the step of adding a polymer degrading agent to the tissue sealant or adhesive at the tissue locus.

190. (New) The method according to claim 189 wherein the degradation agent is provided in an amount sufficient to promote the degradation of the tissue sealant or adhesive in less than 100 days.

191. (New) The method according to claim 189 wherein the degradation agent is provided in an amount sufficient to promote the degradation of the tissue sealant or adhesive in less than 50 days.

192. (New) The method according to claim 189 wherein the degradation agent is provided in an amount sufficient to promote the degradation of the tissue sealant or adhesive in less than 30 days.

193. (New) The method according to claim 189 wherein the degradation agent is provided in an inactive form and is activated after addition to the tissue sealant or adhesive.

194. (New) A kit for making a degradable tissue adhesive or sealant comprising:

- (a) a protein solution;
- (b) a degradation agent; and
- (c) a cross-linker,

wherein the combination of the protein solution and cross-linker with the degradation agent forms the degradable tissue adhesive or sealant.

195. (New) The kit according to claim 194 wherein the protein is selected from the group consisting of albumin, collagen, gelatin, globulin, elastin, protamine, and histone.
196. (New) The kit according to claim 194 wherein the degradation agent comprises a protease.
197. (New) The kit according to claim 196 wherein the protease is selected from the group consisting of bromelain, trypsin, chymotrypsin, clostripain, collagenase, elastase, papain, proteinase K, pepsin, and subtilisin.
198. (New) The kit according to claim 196 wherein the protease comprises trypsin.
199. (New) The kit according to claim 194 further comprising a carbohydrate solution.